

Patent Claims:

- 1.A device for the dough-saving production of a dough strand (28) from a dough mass found in a container (5) made to rotate about its axis (7), for which the container (5) has an outlet at the bottom, characterized in that the outlet (27) is edged by the container (5) and by a cutting disk (13) forming at least a part of the base of the container (5), said cutting disk also being made to rotate in the same direction as the container (5).
- 2.The device according to claim 1, characterized in that the container (5) and the cutting disk (13) edge an outlet (27) which is crescent-shaped in cross section.
- 3.The device according to claim 2, characterized in that the container (5) has a circular opening at the bottom which is covered by a circular cutting disk (13) except for the outlet (27), wherein the cutting disk (13) is approximately as large as the opening of the container (5), however, it is eccentric and axially parallel thereto.
- 4.The device according to any one of the claims 1 to 3, characterized in that the container (5) and the cutting disk (13) rotate at approximately the same peripheral speed.
- 5.The device according to any one of the claims 1 to 4, characterized in that the cutting disk (13) is arranged normally to the container axis (7).
- 6.The device according to any one of the claims 1 to 5,

characterized in that the cutting disk (13) is adjustable relative to the container (5) for the purpose of changing the size of the outlet (27).

7.The device according to any one of the claims 1 to 6, characterized in that a transfer unit for the removal of the dough strand is arranged under the outlet (27).

8.The device according to claim 7, characterized in that the transfer unit is formed by a transfer disk (30) made to rotate, which has an opening (31) in the centre that is passed through by a shaft (15) for the rotational movement of the cutting disk (13), preferably with sufficient clearance for the adjustment of the cutting disk (13).

9.The device according to claim 7 or 8, characterized in that dough sensors (57) are situated above the transfer unit on both sides of the outlet (27), said sensors being connected with a control circuit (59) for adjusting the cutting disk (13).

10.The device according to any one of the claims 1 to 9, characterized in that, seen in direction of movement of the dough strand (28), a weighing device, e.g. weighing rolls (39) follows the outlet (27) or the transfer unit, which controls a dough dividing mechanism (43).

11.The device according to any one of the claims 1 to 9, characterized in that, seen in direction of movement of the dough strand (28), a dough strip forming device (83), e.g. formed by satellite rolls (77), follows the outlet (27) or the transfer unit.

12.The device according to claim 10 or 11, characterized in

that a transfer unit (33), in particular a crawler belt (35), is arranged between the transfer unit (30) and the weighing device (38) or dough strip forming device (83).

13.The device according to claim 10 or 12, characterized in that a round-kneading device (50) or a long-kneading device is attached to the dough dividing device (43).

14.The device according to any one of the claims 1 to 13, characterized in that the directions of rotation of the container (5) and the cutting disk (13) can be reversed and different dough processing devices follow the transfer unit on both sides of the container axis.

15.The device according to any one of the claims 1 to 14, characterized in that a guide element (63), in particular a cone, is arranged in the container (5) so that the dough in the container (5) is guided to the outlet (27).

16.The device according to any one of the claims 1 to 15, characterized in that the axis (7) of the container (5) and the axis (14) about which the cutting disk (13) turns is inclined to the horizontal plane.

17.A method for the dough-saving production of a dough strand from a dough mass found in a container made to rotate about its axis, wherein the dough mass is allowed to flow out downward from the container through an outlet at the bottom, characterized in that the container and a cutting disk adjacent thereto and edging the outlet is allowed to continuously rotate in the same direction, so that the dough strand is continuously cut off from the mass of dough in a shearing gap formed by the outlet.

18. The method according to claim 17, characterized in that the container and the cutting disk are allowed to rotate at the same peripheral speed.
19. The method according to claim 17 or 18, characterized in that size and/or form of the shearing gap are changed in dependency on the measurements and/or the properties of the dough strip obtained.
20. The method according to any one of the claims 17 to 19, characterized in that the dough strand flowing out downward from the outlet is picked up by a continuously moving transfer unit and conveyed for further processing.